

Arkansas State University-Newport's mission is to provide an accessible, affordable, quality education that transforms the lives of our students, enriches our communities, and strengthens the regional economy.

PHYS2133: Survey of Physics for the Health Professions

Catalog Description: A survey for introductory mechanics, waves, electricity, magnetism, optics, and modern physics with applications for students of the health professions.

Course Type: Lecture

Instructor Name:

Office:

Office Phone:

Email:

Office Hours:

Department Information

Course Department:

Academic Department:

Academic Coordinator:

Email:

Associate Dean:

Associate Dean Contact Number:

Email:

Materials: Required and Optional

Required Text: *College Physics, 1st Ed.*, by Openstax College. Openstax, ISBN# 9781938168000. Physical copies of the textbook are available online and from the ASU-Newport Bookstore (<https://bookstore.asun.edu/>) – if you are not in/near Newport, the bookstore can ship the textbook to you! Call the ASU-Newport bookstore at 870-512-7806 for more information. In addition, you can download low- to no-cost digital copies of the text from the Openstax College Physics website (<https://openstaxcollege.org/textbooks/collegephysics/get>). If you go the digital route, I highly suggest making the suggested donation of \$10.

Sapling Learning access (<http://www2.saplinglearning.com/>). You need to purchase access to the Sapling Learning website as many of your assignments will be done on that website; access can be purchased from the ASUN Bookstore or online directly from Sapling Learning. To enroll in PHYS 2133 on Sapling Learning, first go to <http://saplinglearning.com> to create an account (**Please use the name you are enrolled in my course with and your ASUN email!**). Then, follow the instructions at <http://www2.saplinglearning.com/help/student-single-sign>. If followed properly, you will then be able to access our Sapling Learning course directly from our Canvas homepage. During sign up or throughout the term, if you have any technical problems or grading issues, send an email to support@saplinglearning.com or visit <https://community.macmillan.com/community/digital-product-support/college-students-support-community>.

Optional Texts: N/A

Required Material: ASUN campus email and Canvas username and password (these are the same for both email and Canvas); access to a computer with reliable internet access and equipped with Microsoft Word, Microsoft Powerpoint, Microsoft Excel, and Adobe Acrobat Reader; a scientific calculator that can do trigonometric functions; a digital camera or scanner for uploading handwritten work done on assignments; access to a printer.

Optional Materials: N/A

Note: Students are expected to obtain the required text and materials for this course by the start of the term. Accommodations cannot be made concerning assignment due dates and class participation due to a student having not attained the required text and materials. Students participating in online courses are expected to have internet access. Accommodations cannot be made concerning assignment due dates and class participation due to a lapse or absence of internet service or access to a working computer and necessary software. ASUN has computer labs at each of our three campus locations available for students to access during normal hours of operation.

Institutional Learning Outcomes

Upon graduating from ASU-Newport with any Associate Degree, a student will be proficient in the following:

ILO1: Communication

Goal: Students will express ideas, knowledge, and concepts in a clear and concise manner.

- a) Written
- b) Verbal
- c) Interpersonal

ILO2: Reasoning

Goal: Students will apply reasoning skills in a variety of environments, which demonstrate problem-solving and applied knowledge.

- a) Explore
- b) Locate
- c) Interpret
- d) Evaluate
- e) Apply

ILO3: Responsibility

Goal: Students will participate in service activities that instill in them a sense of social responsibility.

- a) Civic
- b) Academic
- c) Financial

Institutional Grading Scale

Grading Scale:

- A: 90-100
- B: 80-89
- C: 70-79
- D: 60-69
- F: 0-59
- S: Satisfactory
- U: Unsatisfactory

Americans with Disabilities Act Compliance

In order to obtain appropriate disability related accommodations and services to which they are entitled, students with documented disabilities should voluntarily and confidentially provide the Office of Disability Services (870-512-7838 or disabilityservices@asun.edu) with appropriate medical documentation regarding the nature and extent of their disability, make their needs known to this Office and follow established procedures for acquiring needed services and accommodations in the classroom or online.

Information Technology Services

If you experience any problems or issues with Canvas, MyCampus, or other equipment, please contact ITS at 870-512-7783 or <http://its.asun.edu>. Canvas also has a 24/7 live chat. This is a valuable resource for those late-night tests or assignments that just do not seem to work properly.

ASU-Newport provides a number of different services to assist students in areas that directly impact their academic success. The following direct websites will help you get in touch with those services that may be needed during your time as an ASUN student:
Academic Support Center: <http://academicsupport.asun.edu>

Financial Aid: <http://financialaid.asun.edu>
 Career Pathways: <http://pathways.asun.edu>
 University Police: <http://cpd.asun.edu>
 Information Technology Services: 512-7783 or its@asun.edu
 Disability Services: http://www.asun.edu/disability_services
 Admissions: <http://admissions.asun.edu>

Academic Dishonesty (as stated in the Student Handbook)

ASU-Newport enthusiastically promotes academic integrity and professional ethics among all members of the ASU-Newport academic community. Violations of this policy are considered serious misconduct and may result in disciplinary action and severe penalties. Cheating in any form-including plagiarism, turning in assignments prepared by others, unauthorized possession of exams - may result in the student being dropped from the class with an “F” and/or being suspended from the College. Students who feel they have been unfairly accused of cheating may appeal to the Associate Dean of General Education.

Campus Safety Information

What to know and do to be prepared for emergencies at ASUN:

- Opt-in to receive ASUN’s School Messenger notifications regarding weather closings, emergencies, and other important notifications. All currently enrolled students will receive an email within the first two weeks of the semester prompting them to Opt-in to the messaging system.
- Know the safe evacuation route from each of your classrooms. Emergency evacuation routes are posted in on-campus classrooms.
- Listen for and follow instructions from your instructor or other designated authorities.
- For additional emergency information see the ASUN Emergency Response Guide in the Portal under “More” then select “Department of Safety”.
- Know the emergency phone number for ASUN Campus Police or dial 911.
- Report suspicious activities and objects found on campus.
- Keep your permanent address and emergency contact information current in My Campus.

Inclement Weather

In the event of inclement weather, class cancelation is left to the discretion of the Chancellor. You will be notified of class cancelation on the university website, through news media, and through our school messaging system.

Children in the Classroom:

ASUN classroom policy requires that the learning environment should be free of distraction in order to provide the highest learning opportunity for all students. In this light, students should not bring children to the classroom. If you must bring a child on campus, please have your child properly supervised in the public gathering areas.

Course Learning Outcomes:

Upon successful completion of this course, students will be able to:

Course Learning Outcomes	Assessment
Students will demonstrate their understanding of the scientific method, evaluating data from measurements and identifying errors while applying their knowledge to solve real world problems utilizing its principles.	- homeworks - quizzes - exams - final
Students will demonstrate their understanding of the fundamental concepts of mechanics, articulating when, where, and how to apply the laws and principles and applying their knowledge to evaluate and solve real world problems involving topics such as kinematics and dynamics in one or two dimensions, energy, and heat.	- homeworks - quizzes - exam #1 - final
Students will demonstrate their understanding of the fundamental concepts of electricity and magnetism, articulating when, where, and how to apply the laws and principles and applying their knowledge to evaluate and solve real world problems involving topics such as electric and magnetic forces and fields, electric potential, and current.	- homeworks - quizzes - exam #2 - final
Students will demonstrate their understanding of the fundamental concepts of periodic motion, articulating when, where, and how to apply the laws and principles and	- homeworks - quizzes

applying their knowledge to evaluate and solve real world problems involving topics such as waves and sound.	- exam #3 - final
Students will demonstrate their understanding of the fundamental concepts of light and optics, articulating when, where, and how to apply the laws and principles and applying their knowledge to evaluate and solve real world problems involving topics such as geometric optics.	- homeworks - quizzes - exam #3 - final
Students will demonstrate their understanding concepts of modern physics, articulating when, where, and how to apply the laws and principles and applying their knowledge to evaluate and solve real world problems involving topics such as the atom and radioactive decay.	- homeworks - quizzes - exam #3 - final

MASTERY SUMMATIVE ASSESTMENT (MSA): FINAL

The comprehensive final also serves as the Mastery Summative Assessment (MSA) for Physics for the Health Professions. A student in Physics for the Health Professions must satisfy the course learning outcomes assigned to the course as evidenced by the MSA in order to successfully obtain the grade earned in the course. If a student is passing the course but fails to satisfy the course outcomes on the MSA, then the student will fail the course.

Course Policies and Procedures

Academic Calendar

Disclaimer

This syllabus and all documents associated with the syllabus are considered a contract between the student and the instructor. Students are expected to carefully read and review the syllabus and all associated documents in order to be familiar with course expectations and policies. This syllabus is subject to change at the discretion of the instructor, who will inform students of any changes. Students are responsible for keeping up with any changes.